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XLIII.—Rhynchotal Notes.—L. By W. L. DISTANT.

Fam. Fulgoridæ.

Subfams. Acanalolinæ and Flatinæ.

In 1901-1902 Dr. Melichar published his 'Monographie der Acanaloniiden und Flatiden,' which was rightly welcomed by all homopterists. He, however, did not see the numerous types of Walker belonging to these subfamilies, and has not unnaturally fallen into the greatest misunderstanding as to their proper location. In these pages I have therefore sought to correct that part of his work, with Walker's types before me in the British Museum. The Malayan species are dealt with in part iii. of my 'Rhynchota Malayana' (Records of the Indian Museum), and those from all other localities are recorded in this paper.

All the types of the species now described are contained

in the British Museum.

Subfam. ACANALOIINÆ.

Genus Acanalonia.

Acanalonia, Spin. Ann. Soc. Ent. Fr. (1) viii. p. 447 (1839).

Type, A. servillei, Spin.

Ann. & Mag. N. Hist. Ser. 8. Vol. v.

Acanalonia varipennis.

Paciloptera varipennis, Walk. List Hom., Suppl. p. 113 (1858).

Acanonia varipennis Stål, Öfv. Vet.-Ak. Förh. 1862, p. 491.

Paciloptera viridissima, Walk. Ins. Saund., Hom. p. 54 (1858). Cromna peracuta, Melich. (part.) Ann. Hofmus. Wien, xvii. p. 62

(1901).

Colgar peracuta, Kirk. (part.) Rep. Exp. Stat. Haw. Plant. Assoc. pt. ix. p. 458 (1906).

Hab. Amazons.

Walker correctly localized his *P. varipennis* as from Para, and *P. viridissima* as from "Tocant," an abbreviation for the well-known Tocantins River. This, however, has not prevented it being considered a synonym of the Australian species *C. peracuta*, by both Melichar and Kirkaldy.

Acanalonia laurifolia.

Pæciloptera laurifolia, Walk. List Hom., Suppl. p. 117 (1858). Acanalonia servillei, Melich. (part.) Ann. Hofmus. Wien, xvi. p. 186 (1901).

Hab. Amazons.

Dr. Melichar has treated this species as a synonym of A. servillei, from which, however, it differs in the transverse and much less anteriorly angulated vertex.

Acanalonia complanata.

Pæciloptera complanata, Walk. List Hom. ii. p. 461 (1851); Melich. Ann. Hofmus. Wien, xvii. p. 227 (1903).

Hab. ---?

Genus Parathiscia.

Parathiscia, Melich. Ann. Hofmus. Wien, xvi. p. 194 (1901).

Type, P. congugata, Melich.

Parathiscia truncatella.

Dalapax truncatella, Walk. List Hom., Suppl. p. 332 (1858). Pseudoftata nigricornis, Melich. (part.) Ann. Hofmus. Wien, xvi. p. 251 (1901).

Hab. Natal.

I have figured this species in my 'Insecta Transvaaliensia,' pt. x. tab. xxiii. fig. 2.

Subfam. FLATINÆ.

Genus ITYREA.

Ityræa, Stål, Hem. Afr. iv. p. 235 (1866). Type, I. nigrocincta, Walk.

Ityræa gregoryi, sp. n.

Head dull reddish, antennæ black; pronotum and mesonotum sanguineous; abdomen above and body beneath pale ochraceous, thickly whitishly tomentose; anterior and intermediate legs piceous or black, more or less greyishly tomentose, posterior legs ochraceous, apices of tibiæ and the tarsi fuscous; tegmina ochraceous, narrowly carmine-red at base, costal, apical, and posterior claval margins narrowly piceous, at apex of clavus a piceous spot more or less linearly extending into corium; wings milky white; antennæ with the second joint more than twice the length of first; pro- and mesonota tricarinate; tegmina twice as long as broad.

Length, excl. tegm., 3 9 10 mm.; exp. tegm. 40-42 mm.

Hab. Brit. East Africa; Kibwezi River (Gregory).

A species allied to *I. nigrocincta*, Walk., from which it appears—judging from a series of six specimens—to constantly differ by the darker tegmina and the narrower structure of the same (twice as long as broad). It is also allied to *I. electa*, Melich., from the description of which it differs by the differently coloured margin of the tegmina.

This is one of the species illustrated in the frontispiece to Gregory's 'The Great Rift Valley,' but incorrectly coloured. It is, however, correctly portrayed in plate xxvi. Trans. Ent. Soc. Lond. (1902); the green insect in both plates is the

I. speciosa, Melich.

Genus Phromnia.

Phromnia, Stål, Rio Jan. Hem. ii. p. 68 (1858).

Type, P. pallida, Oliv.

Phromnia pallida.

Fulgora pallida, Oliv. Enc. Méth. vi. p. 575. 42 (1791). Phromnia pallida, Stål, Hem. Afr. iv. p. 239 (1866) et syn. Flata pallida, Melich. Ann. Hofmus. Wien, xvi. p. 211 (1901).

Var. limbata.

Cicada limbata, Fabr. Ent. Syst. iv. p. 27.3 (1794).

Phromnia pallida, var. limbata, Stål, Hem. Afr. iv. p. 239 (1866) et syn.

Flata limbata, Melich. Ann. Hofmus. Wien, xvi. p. 206 (1901).

Melichar has separated the forms pallida and limbata rather widely apart in his monograph of the genus (supra). I think, however, that Stål's view must be maintained, especially as the same variation occurs in the following Ethiopian species.

Hab. West and Central Africa.

Phromnia superba.

Flata superba, Melich. Ann. Hofmus, Wien, xvi. p. 206 (1901).

Var.—Tegmina pale tawny, not virescent, apical margin very narrowly black, costal margin obscurely reddish, posterior margin of clavus spotted with black and its lower base marked as in typical forms of the species.

Hab. Congo; Lutiti (Dr. Christy). Gold Coast (Dr. Graham), S. Nigeria (Dr. Collett), Beudi (Dr. MacAlister), Ashanti (Dudgeon, Brit. Mus.). Sierra Leone and Came-

roons (fide Melichar).

Phromnia superba, Melich., could easily be recognized as a small form of P. pallida, Oliv.

Phromnia neavei, sp. n.

Body and legs virescent, abdomen sometimes completely greyishly tomentose, anterior and intermediate tibiæ and tarsi black; antennæ black; tegmina virescent, costal and apical margins—to apex of clavus—somewhat broadly sanguineous, extreme apical margin fuscons or black; posterior margin of clavus black but not reaching base, where the margin is somewhat broadly ochraceous; wings creamy white, the extreme base virescent.

Var.—Tegmina ochraceous, not virescent.

Antennæ with the second joint nearly half as long again as first; pro- and mesonota tricarinate; anterior and intermediate tibiæ strongly sulcate, posterior tibiæ with two spines.

Long., excl. tegm., ♂ 12, ♀ 13 mm.; exp. tegm., ♂ 38,

♀ 41 mm.

Hab. S.E. Congo Free State; W. of Kambove (Neave). To be separated from P. pallida and P. superba by the black, not spotted posterior margin of the clavus and by the absence of the black basal spot from same.

Phromnia angolensis, sp. n.

Body pale ochraceous; antennæ, anterior and intermediate tibiac and tarsi black; tegmina greenish ochraceous, costal

margin sanguineous, apical margin narrowly black; wings creamy white; antennæ with the second joint about half as long again as first; pro- and mesonota tricarinate; tegmina less than twice as long as broad.

Var.—Body and tegmina tawny ochraceous; tegmina with the costal margin obsoletely sanguineous, the apical margin

narrowly black as in typical form.

Long., excl. tegm., 10 mm.; exp. tegm., 9 35-38 mm.

Hab. Angola (Welwitsch).

This species differs from P. neavei by its smaller size, and from it and the other African species by the unicolorous claval area and absence of black margin to same. The three specimens which have served for the above description were delivered to the British Museum by the executors of Dr. Welwitsch, as from the King of Portugal, in accordance with a decree of the High Court Judicature, November 1875.

Genus FLATINA.

Flatina, Melich. Ann. Hofmus. Wien, xvi. p. 214 (1901).

Type, F. rubrotincta, Hagl.

Flatina fimbriata.

Pæciloptera fimbriata, Walk. Ins. Saund., Hom. p. 54 (1858).
Phyllyphanta cornutipennis, Melich. (part.) Ann. Hofmus. Wien, xvii. p. 55 (1902).

Walker's type is from an unknown locality, but I possess a specimen received from Sierra Leone.

Flatina ornatula, sp. n.

Body and lcgs pale greyish; pro- and mesonota with two longitudinal pale sanguineous fasciæ, the margins of the latter more obscurely sanguineous; eyes and antennæ black, the latter palely tomentose; tegmina pale ochraceous grey, the costal, apical, and posterior claval margins narrowly dull reddish, three unbroken oblique fasciæ (not extending upwards beyond margin of costal membrane) and the clavus (excluding inner margin and basal area) pale sanguineous; wings creamy white; tegmina about one-third longer than broad; the claval area prominently granulate, first and second joints of antennæ subequal in length; pro- and mesonota longitudinally tricarinate.

Long., excl. tegm., $8\frac{1}{2}$ mm.; exp. tegm. 28 mm. *Hab.* West Africa; Volta River (*Crowley Bequest*, Brit. Mus.). Allied to F. liciata, Melich., from which it differs by the broader and unbroken sanguineous fasciæ to the tegmina, the more granulate clavus, &c.

Genus Paraflata.

Paraflata, Melich. Ann. Hofmus. Wien, xvi. p. 217 (1901).

Type, P. seminigra, Stål.

Paraflata kingdomi, sp. n.

Body and legs black; eyes, narrow anterior margin of pronotum, abdominal segmental margins, basal and apical margins to first joint of antennæ, coxal and other irregular sternal spots greyish white; tegmina pale ochraceous, less than basal half—truncate not sinuate externally—black; wings creamy white; antennæ robust, first and second joints subequal in length; pro- and mesonota somewhat crushed in typical specimen; tegmina not quite twice as long as broad, claval area finely granulate; posterior tibiæ with a single spine a little before apex.

Long., excl. tegm., ? 11 mm.; exp. tegm. 37 mm. Hab. Madagascar; Antananarivo (Kinydom, Brit. Mus.).

Allied to P. seminigra, Stål, but differing by its larger size, different markings of the tegmina, the black basal area smaller and outwardly truncate, &c.

Genus Cryptoflata.

Cryptoftata, Melich. Ann. Hofmus. Wien, xvii. p. 19 (1902).

Type, C. unipunctata, Oliv.

Cryptoflata guttularis.

Nephesa guttularis, Walk. Journ. Linu. Soc. Lond., Zool. i. p. 160 (1857).

Var. punctipennis, Walk., MS.

Tegmina pale virescent, spotted as in typical guttularis. Assam; Margherita. N. China (Brit. Mus.).

Cryptoflata unipunctata.

Fulgora unipunctata, Oliv. Enc. Méth. vi. p. 576 (1791). Colobesthes bigutta, Walk. List Hom. ii. p. 441 (1851).

Paciloptera sobrina, Stäl, Öfv. Vet.-Ak. Förh. 1855, p. 191. Cryptoftata unipunctata, Melich. Ann. Hofmus. Wien, xvii. p. 23

(1902).

Var. areolifera, Walk.

Paciloptera areolifera, Walk. List Hom., Suppl. p. 112 (1858). Cryptoflata areolifera, Melich. Ann. Hofmus. Wien, xvii. p. 24 (1902).

Hab. West Africa, East Africa, Natal.

Cryptoflata hova, sp. n.

Body and legs pale ochraceous with a virescent tint, probably more decidedly greenish in fresh specimens; tegmina sordidly grevish white, claval area somewhat thickly covered with dull reddish granules and some smaller scattered granules of the same colour on basal area of corium beneath the radial area; wings creamy white; vertex transverse, about twice as broad as long, centrally longitudinally carinate, the lateral margins also carinate, the apex truncate; face a little longer than broad, centrally longitudinally carinate, the carination only extending about halfway from base, lateral margins a little laminate; rostrum slightly passing the anterior coxæ; tegmina twice as long as broad, widened towards apex, apical margin subtruncate, posterior margin moderately concavely sinuate, costal membrane only slightly narrower than radial area, the apical marginal area wider at apex than at posterior angle; tibiæ sulcate.

Long., excl. tegm., 9 7 mm.; exp. tegm. 23 mm. Hab. Central Madagascar (Rev. Deans Cowan, Brit. Mus.).

Genus Melicharia.

Melicharia, Kirk. Entomologist, xxxiii. p. 294 (1900).

Type, M. quadrata, Kirby.

Melicharia doddi, sp. n.

Head, pronotum, and mesonotum more or less olivaceous green, pro- and mesonota with a broad central longitudinal brownish fascia; abdomen above olivaceous green, thickly whitely tomentose; body beneath and legs pale virescent; tegmina pale green, with the veins more ochraceous, costal margin from about one-fourth from base, apical and inner margin to apex of clavus, and the apical two-thirds of claval vein sanguineous; in costal membrane beneath the costal margin are some minute sanguineous spots and a few more of rather paler colour in arched series on posterior disk of corium, base of costal margin ochraceous; wings creamy white; vertex much broader than long, anteriorly truncate,

centrally and laterally carinate, face obliquely broadened anteriorly, the anterior margin truncate, centrally longitudinally carinate throughout its whole length, the lateral margins broadly reflexed; tegmina twice as broad as long, apical margin subtruncate, the apical and posterior angles rounded, the inner margin angularly sinuate at apex of clavus, two transverse lines formed of transverse veins on apical area, the outermost moderately convex, euclosing a series of narrow longitudinal marginal cellular areas, the inner less well defined.

Long., excl. tegm., \Im $4\frac{1}{2}$ mm.; exp. tegm. 14 mm. Hab. Queensland; Kuranda (F. P. Dodd, Brit. Mus.).

In colour and pattern of tegmina, but not in shape or structure of head, somewhat resembling Colgar peracuta, Walk.

Melicharia unicolor.

Massila unicolor, Walk. Journ. Ent. i. p. 315 (1862); Melich. Ann. Hofmus. Wien, xvii. p. 159 (1902).

Hab. Moreton Bay.

Melicharia lurida.

Pæciloptera lurida, Walk. Ins. Saund., Hom. p. 53 (1858); Melich. Ann. Hofmus. Wien, xvii. p. 229 (1902).

Hab. Gambia.

A single typical specimen in very bad condition.

Genus SIPHANTA.

Siphanta, Stål, Hem. Afr. iv. p. 238 (1866).

Type, S. acuta, Walk.

Siphanta atomaria.

Pæciloptera atomaria, Walk. Ins. Saund., Hom. p. 56 (1858).
Colgar atomaria, Melich. Ann. Hofmus. Wien, xvii. p. 117 (1902).
Neomelicharia? atomaria, Kirk. Rep. Exp. Stat. Haw. Plant. Assoc. pt. ix. p. 453 (1906).

Hab. Tasmania.

Siphanta stigma, sp. n.

Head, pronotum, mesonotum, and abdomen above ochraceous, the latter greenish on basal area; body beneath and legs greenish ochraceous, tibiæ (excluding basal areas) and the tarsi dull pale reddish; tegmina pale greenish ochraceous,

excluding clavus and costal membrane thickly finely spotted with greyish white, the veins darker and green in colour, a distinct small fuscous spot on central disk of apical area, the costal margin from about end of radial area, continued round apical margin to end of clavus, very finely spotted with dull reddish; wings creamy white; vertex subequal in length to that of pronotum, anteriorly subangularly rounded, the margins distinctly carinately elevated and narrowly reddish, two central converging carinate lines united anteriorly; pronotum rugulosely granulose; mesonotum tricarinate, obscurely granulose; tegmina about twice as long as broad, the costal margin rounded at basal area, apical margin subtruncate, the apical and posterior angles rounded; clavus somewhat coarsely granulose.

Long., excl. tegm., ♀ 6 mm.; exp. tegm. 17 mm.

Hab. Australia, sic (Brit. Mus.).

This species is unfortunately not precisely located, but is almost certainly from South-east Australia.

Siphanta sp.

Siphanta galeata, Kirk. Rep. Exp. Stat. Haw. Plant. Assoc. pt. ix. p. 453, pl. xxxii. fig. 11 (1906); id. Rep. Exp. Stat. Haw. Plant. Assoc., Bull. iii, p. 99, pl. v. fig. 3, and pl. vi. figs. 3 & 4 (1907).

Hab. Queensland.

The head and pronotum of this proposed species, as represented by the two figures given by Kirkaldy (1906 and 1907), are quite dissimilar, and cannot be taken to represent the same species. As neither of them has been disowned, S. galeata without an examination of the type (now at

Honolulu) is outside present recognition.

In the above publication Kirkaldy has unfortunately increased his mystification of this genus by giving different references to figures for the same species. Thus both S. acuta and S. breviceps are referred (supra, 1907, p. 100) to pl. iii. fig. 2, but in the description of the plates the latter is referred to pl. v. fig. 2, while a comparison of the figures on the plates will show that more than one genus is represented. A glance at the venation of the species illustrated on plates iv. and v. (1907) will prove that contention *.

SIPHANTOIDES, gen. nov.

Vertex coarsely granulose, about as broad as long, as long as pronotum, subquadrate, anterior margin truncate, a little

* Since this was written we regret to have heard of the death of Mr. Kirkaldy at San Francisco

rounded at the anterior angles; face longer than broad, flat. somewhat concavely depressed, basal margin a little rounded. lateral margins from elvpeus to about one-third from base laminately reflexed; elvpeus small, the margins broadly ridged; pronotum coarsely granulose, the lateral margins ridged, anterior margin truncate, posterior margin concave, the lateral margins obliquely rounded; mesonotum coarsely granulose, longer than pronotum, the disk raised and ridged at each lateral margin; legs of moderate length, tibiæ sulcate, posterior tibiæ not spined; tegmina about one and a half times longer than greatest breadth, twice as broad at apex as at base, strongly arched to apex, which is broadly rounded, apical margin obliquely truncate, its posterior angles angulate, but not or only very slightly posteriorly produced, the posterior margin angularly sinuate at apex of clavus, two strongly branched longitudinal veins arising from basal cell, costal membrane a little narrower than radial area, the first transversely, the latter reticulately veined, clavus coarsely granulose; wings about as broad as tegmina; two transverse veins before apical area.

Type, S. conspicua, Dist.

Siphantoides conspicua, sp. n.

Body and legs bright ochraceous, abdomen more or less greyishly tomentose, tibiæ and tarsi more or less sanguineous; tegmina virescent, inclining to ochraceous, a large basal castaneous spot extending from claval vein to the second longitudinal vein emanating from basal cell, a waved oblique castaneous fascia irrorated with virescent spots extending upward from apex of clavus to about one-third from costal margin, apical margin extending to apex of clavus finely spotted with castaneous, the claval granules mostly red; wings milky white, with a slightly bluish reflection.

Long., excl. tegm., 8 mm.; exp. tegm. 22 mm. Hab. Queensland; Townsville (Dodd, Brit. Mus.).

Siphantoides trimaculatus, sp. n.

Vertex, pronotum, and mesonotum bright orange-yellow; eyes castaneous; abdomen above greyishly tomentose, the margins of the segments palely virescent; body beneath and legs pale ochraceous, abdomen beneath greyish; anterior and intermediate tibiæ more or less suffused with sanguineous; tegmina pale virescent, with three small dull reddish spots, one in clavus near base, one at apex of clavus, and the other on disk near middle, apical margin continued

to claval apex finely spotted with sanguineous; wings milky white, the veins virescent; vertex, pronotum, and mesonotum rugulosely granulose; vertex about as broad as long and as long as pronotum, the lateral margins of which are ridged; mesonotum longer than pronotum, the disk raised and ridged at each lateral margin; clavus coarsely granulose.

Long., excl. tegm., 7 mm.; exp. tegm. 20 mm.

Hab. Queensland (Dodd, Brit. Mus.).

Siphantoides alboconspersus, sp. n.

Vertex, pronotum, and mesonotum orange-yellow, abdomen above pale virescent; body beneath and legs pale ochraceous, apices of anterior and intermediate tibiæ and tarsi slightly suffused with sanguineous, tegmina greyishly virescent, with all the veins broadly ochraceous, thus producing the appearance of numerous pale spots, the apical margin continued to claval apex finely spotted with sanguineous; clavus coarsely granulose, the granules dull reddish; wings milky white, the veins pale virescent; vertex, pronotum, and mesonotum rugulosely granulose; vertex about as long as broad and as long as pronotum; mesonotum somewhat mutilated in typical specimen; anterior lateral margins of face distinctly dark ochraceous.

Long., excl. tegm., 7 mm.; exp. tegm. $17\frac{1}{2}$ mm. Hab. Queensland (Dodd, Brit. Mus.).

Genus Colgar.

Colgar, Kirk. Entomologist, 1900, p. 242; id. loc. cit. 1903, p. 79.
Atella, Stål (part.), Hem. Afr. iv. p. 238 (1866); id. Berl. ent. Zeitschr. x. p. 394 (1866) (nom. preocc.).
Cromna, Melich. (part.) Ann. Hofmus. Wien, xvii. p. 58 (1902).

Type, C. peracuta, Walk.

Colgar roseipennis, sp. n.

Body and legs ochraceous or greenish ochraceous; apical area of vertex, basal area of face, apices of tibiæ, tarsi, and anal abdominal appendage above more or less rosaceous; tegmina greyish, with the apical area and the whole of the venation rosaceous, two small spots on disk of corium and the apical margin darker and more roseate in hue; wings creamy white, with the basal longitudinal veins roseate; vertex upwardly and angularly produced, somewhat conical; face much longer than broad, narrowed at base, centrally longitudinally carinate; tegmina about twice as long as

broad, apical margin a little obliquely truncate; clavus prominently granulose, many of the granules roseate in hue.

Long., excl. tegm., $6\frac{1}{2}$ mm.; exp. tegm. 15 mm.

Hab. Queensland (Dodd, Brit. Mus.). No special locality given by Mr. Dodd.

Colgar peracuta.

Cromna peracuta, Walk. List Hom., Suppl. p. 120 (1858); Melich. (part.) Ann. Hofmus. Wien, xvii. p. 62 (1902).

Colgar peracuta, Kirk. Entomologist, 1900, p. 242.

P. Euphanta rubromarginata, Schmidt, Stett. ent. Zeit. 1904, p. 360.

Melichar (supra) has proposed some unfortunate synonymy respecting this species. The Cromna nasalis, Walk. (List Hom., Suppl. p. 120, 1858), which he includes, he has previously (loc. cit. p. 40) rightly placed as a synonym of Euphanta munda, Walk. Pæciloptera viridissima, Walk., placed as another synonym, is a species of Acanalonia, = A. varipennis, Walk. Another species included by Melichar, Flatoides simplex, Walk. (Journ. Linn. Soc. Lond., Zool. x. p. 143, 1868), is not even a Flatid, but belongs to the Tropiduchinæ and to the genus Ficarasa, Walk. Pæciloptera roseicincta, Walk. (Journ. Ent. i. p. 313, 1862), another inclusion, belongs to the genus Parasalurnis, whilst Nephesa grata, Walk., which heads the synonymic list, can rightly be left in Nephesa where Walker placed it.

Colgar rufostigmata, sp. n.

Body and legs very pale virescent; abdomen above and body beneath more or less greyishly tomentose; tegmina very pale virescent, sometimes almost greyish white, the costal margin from end of costal membrane and the apical margin continued to apex of clavus very narrowly sanguineous (in some specimens the marginal coloration is obsolete), a prominent sanguineous spot near middle of tegmen, and a smaller spot of the same colour nearer base; wings milky white; vertex scarcely or only slightly longer than pronotum, finely centrally longitudinally carinate; face with the sublateral carinations reaching margin of clypeus; pronotum very indistinctly carinate; mesonotum faintly tricarinate; tegmina slightly less than twice as long as broad, their apical margins subtruncate, costal margin moderately arched at base; claval area subprominently granulose.

Long., excl. tegm., $3 \circ 7-8$ mm.; exp. tegm. 19-20 mm. Hab. Queensland; Townsville (Dodd, Brit. Mus.); More-

ton Bay (Pascoe Coll., Brit. Mus.).

Colgar tricolor, sp. n.

Body and legs pale green; abdomen above and body beneath whitely tomentose; tegmina pale green, with numelous irregular whitish spots, beyond the middle some of these spots form more or less distinctly two oblique macular fascia, costal margin from end of costal membrane, and apical margin continued to claval apex, very narrowly sanguineous, three small sanguineous spots in longitudinal series on disk, the one nearest base usually smallest and somewhat indistinct; wings creamy white, the veins more or less pale bluish green; vertex finely sparingly granulose, anteriorly moderately upturned, a little longer than the pronotum, strongly centrally longitudinally carinate; pronotum very sparingly granulose, centrally carinate, the lateral margins also carinate: mesonotum tricarinate; tegmina about twice as long as broad, moderately arched at base, the apical margin truncately oblique; claval area strongly granulose.

In some specimens the apical area of the tegmina is somewhat suffused with pale reddish ochraceous and the carinations

to the face are more or less sanguineous.

Long., excl. tegm., $3 \circ 7-7\frac{1}{2}$ mm.; exp. tegm. 19-20 mm. *Hab.* Queensland; Kuranda (*Dodd*, Brit. Mus.).

Parasalurnis, gen. nov.

Vertex a little angularly produced, centrally longitudinally impressed; face somewhat convex, a little longer than broad, strongly centrally longitudinally ridged, the basal and lateral margins ridged, the latter also laminately reflexed; pronotum as long as or longer than vertex, granulose, more or less centrally longitudinally depressed, strongly sublaterally carinate on each side; mesonotum tricarinate; tegmina less than twice as long as broad, costal margin a little rounded, apical margin subtruncate, the apical and posterior angles rounded, inner margin concavely sinuate, claval area strongly granulose, corium with a network of numerous transverse veins, thus resembling the genus Salurnis.

Type, P. roseicincta, Walk.

Parasalurnis roseicincta.

Pæciloptera roseicineta, Walk. Journ. Ent. i. p. 313 (1862). Cromna peracu'a, Melich. (part.) Ann. Hofmus. Wien, xvii. p. 62 (1902). ? Siphanta rubra, Schmidt, Stett. ent. Zeit. lxv. p. 358 (1904).

Hab. Australia; Moreton Bay (Brit. Mus.).

Parasalurnis insularis, sp. n.

Vertex sanguineous, more or less ochraceous at base: face and clypeus ochraceous, the lateral margins of the first more or less sanguineous and with two small brownish spots before clypeus, which has two linear brownish spots separated by a central pale slightly carinate line; pro- and mesonota bright ochraceous; abdomen above ochraceous, the base suffused with blackish; body beneath and legs ochraceous. the latter with their upper surfaces carmine-red; tegmina bright ochraceous, a little paler between the numerous transverse veins, giving the appearance of pale grevish spots, costal margin to about end of radial area very narrowly carminered, thence round apex, along apical margin to end of clavus closely marked with small carmine-red spots, claval vein similarly spotted; wings creamy white; vertex a little subangularly produced, centrally longitudinally impressed: face with the lateral margins slightly convex, strongly centrally longitudinally ridged, the lateral margins ridged and laminately reflexed; pronotum granulose; mesonotum granulose on anterior area, tricarinate; tegmina less than twice as long as broad, with the claval area strongly granulose.

Long., excl. tegm., 5 mm.; exp. tegm. 16 mm. Hab. N.W. Australia; Baudin Island (J. J. Walker, Cruise of H.M.S. 'Penguin'; Brit. Mus.).

Parasalurnis infumata, sp. n.

Body and legs pale greenish yellow; anterior margin of vertex, basal margin of face, and the tibiæ and tarsi more or less dull reddish; tegmina pale green, the areas enclosed by the numerous transverse veins paler in hue and giving the appearance of obscure greyish spots, costal and apical margins to end of clavus spotted with dull reddish, a few small scattered red spots on disk, claval granules piceous, and a large broad irregular longitudinal fascia, occupying clavus for about one-third its length, then broadened and extended upward on corium and obliquely continued to posterior angle, umberbrown; wings creamy white; vertex about or almost as long as pronotum, anteriorly subangulate, medially impressed; face longer than broad, strongly centrally longitudinally ridged, the lateral margins ridged and laminately reflexed; tegmina less than twice as long as broad, strongly arched at base, apical margin truncately rounded, inner margin sinuate at apex of clavus.

Long., excl. tegm., 7 mm.; exp. tegm. 19 mm. Hab. Queensland; Townsville (Dodd, Brit. Mus.).

Neosalurnis, gen. nov.

Head (including eyes) a little narrower than pronotum, vertex about as long as pronotum, somewhat broadly, angularly, and a little upwardly produced; face longer than broad, a little posteriorly and more strongly anteriorly narrowed, the lateral margins from a little in front of eyes to clypeus broadly laminately ridged, at base with a very short central carination; clypeus shorter than face, obscurely obliquely striate on each side; pronotum with a central longitudinal ridge; mesonotum tricarinate; legs of moderate length, tibiæ sulcate, posterior tibiæ with one spine near apex; tegmina less than twice as long as broad, the costal margin moderately convex, the apex rounded, the apical margin obliquely truncate, its posterior angle more or less acutely produced, costal membrane narrower than radial area, the first transversely veined, the latter reticulately veined, the whole corium transversely reticulately veined, and a series of longitudinal marginal cells more or less continuous with the costal membrane extending round apex and along apical margin, clavus coarsely granulose; wings about as broad as tegmina, two transverse veins before apical area.

This genus is allied to *Salurnis*, Stål, from which it principally differs by the venation of the tegmina, and by the costal and apical marginal series of short longitudinal cells.

Neosalurnis reticulatus, sp. n.

Head, pronotum, mesonotum, sternum, legs, abdomen beneath, and tegmina greenish ochraceous, abdomen above slightly greyishly tomentose; wings milky white, the veins greenish; apical and sutural margin (beyond clavus) of tegmina finely spotted with fuscous brown, posterior margin of clavus more or less fuscous brown; tegmina with all the veins distinctly prominent and a little darker in coloration; other structural characters as in generic diagnosis.

Long., excl. tegm., 8 mm; exp. tegm. 24 mm. Hab. Bhutan (Brit, Mus.). Burma; Karen Hills (Doherty, Coll. Dist.).

GERALDTONIA, gen. nov.

Vertex as long as or slightly longer than pronotum, almost as broad as long, the lateral margins parallel and ridged, notched before apex and then apically, angularly convexly rounded, a little deflected on each side and strongly centrally longitudinally ridged; face longer than broad, wider posteriorly

than at base, which is rounded, the lateral margins notched before base and again behind middle, a very short prominent longitudinal central ridge at base, and an obscure oblique ridge on each side, commencing at anterior notch and obliquely, inwardly directed towards clypeus, the lateral margins laminately reflexed; pronotum tricarinate, anterior margin convex, basal margin concave; mesonotum much longer than pronotum, tricarinate; legs of moderate size, the tibiæ sulcate, posterior tibiæ with a distinct spine before apex: tegmina about twice as long as broad, apically widened, costal margin strongly arched at base, moderately deflected towards apex, which is rounded, apical margin truncate, its posterior angles strongly, angularly backwardly produced, costal membrane narrower than radial area, clavus with transverse veins above claval vein, beneath this vein strongly granulose, three strongly branching longitudinal veins from upper end of cell; wings broad, two transverse veins before apical area.

Allied to Scarpantina, Melich., but differing strongly in

the structure of the vertex.

Geraldtonia protea, sp. n.

Body above virescent or greenish ochraceous; vertex, pronotum, and mesonotum more or less centrally purplish brown; abdomen above greyishly tomentose; body beneath and legs dull ochraceous; lateral and basal margins of face usually narrowly sanguineous, and the short central longitudinal basal ridge of that colour; tegmina bright virescent, with numerous scattered small dull reddish spots, a more prominent and more piceous spot beneath the radial vein near base, on disk above apical area of clavus a large and small white spot, divided from each other and margined with dull reddish, granules to clavus reddish and claval posterior margin from a short distance from base piceous brown, beyond clavus the sutural margin spotted with castaneous; wings milky white, veins with a slight virescent tint.

Var. a.—The large white spot to tegmina divided into a cluster of some twelve unequal parts by dull reddish lines, outwardly margined with dull reddish as in typical form.

Var. b.—The large white spot as in var. a now totally dull reddish.

Long., excl. tegm., 9-10 mm.; exp. tegm. 26 mm.

Hab. Queensland (Dodd, Brit. Mus.); Geraldton, near Cairns (Meek, Brit. Mus.).

Geraldtonia uniformis, sp. n.

Head, pronotum, and mesonotum virescent or greenish ochraceous and more or less centrally suffused with purplish brown; abdomen above greyishly tomentose; body beneath and legs pale ochraceous; lateral and basal margins of face narrowly sanguineous and the short central basal carination of that colour; tegmina pale ochraceous, with numerous small scattered dull reddish spots, across disk before apical area a narrow oblique pale fascia containing a series of the dull reddish spots and outwardly margined with pale reddish, granules in clavus mostly dull red, the claval posterior margin at a short distance from base purplish brown, the sutural margin beyond clavus spotted with castaneous; wings milky white, the veins faintly pale virescent.

Var. a.—Tegmina virescent, the pale oblique fascia not

outwardly margined with reddish.

Long., exel. tegm., 10 mm.; exp. tegm. 30 mm.

Hab. Queensland (Dodd, Brit. Mus.); Geraldton, near Cairns (Meek, Brit. Mus.).

Genus Ormenis *.

Ormenis, Stål, Rio Jan. Hem. p. 68 (1862).

Type, O. perfecta, Walk.

Ormenis perfecta.

Paciloptera perfecta, Walk. List flom. ii. p. 449 (1851); Stål, Öfv. Vet.-Ak d. Förh. 1862, p. 489.

Pwciloptera rufo-terminatu, Stål, Rio Jan. Hem. ii. p. 11 (1861).
Ormenis testacea, Melich. (part.) Ann. Hofmus. Wien, xvii. p. 80 (1902).

Hab. Jamaica, Brazil.

Ormenis testacea.

Paciloptera testacea, Walk. List Hom. ii. p. 456 (1851). Paciloptera varicosa, Walk. Ins. Saund., Hom. p. 53 (1858). Ormenis testacea, Melich. (part.) Ann. Hofmus. Wien, xvii. p. 80 (1902).

Hab. Amazons.

* The large number of species included at present in Ormenis will probably at some future time receive generic subdivision.

Ormenis primaria.

Pæciloptera primaria, Walk. List Hom., Suppl. p. 334 (1858).
Ormenis testacea, Melich. (part.) Ann. Hofmus. Wien, xvii. p. 80 (1902).

Hab. Rio Janeiro.

Ormenis intricata.

Paciloptera intricata, Walk. Ins. Saund., Hom. p. 52 (1858).

Hab. Brazil.

Ormenis discus.

Flatoides discus, Walk. List Hom. ii. p. 409 (1851).

Ormenis discus, Stål, Öfv. Vet.-Ak. Förh. 1862, p. 490; Melich. Ann. Hofmus. Wien, xvii. p. 75 (1902).

Flatoides latistriga, Walk. Ins. Saund., Hom. p. 48 (1858).

Ormenis latistriga, Melich. Ann. Hofmus. Wien, xvii. p. 98 (1902).

Hab. Amazons.

Ormenis perpusilla.

Pæciloptera perpusilla, Walk. List Hom. ii. p. 467 (1851).

Ormenis perpusilla, Melich. (part.) Ann. Hofmus. Wien, xvii. p. 90 (1902).

Ormenis tortricina, Melich. (part.) loc. cit. p. 81.

The unique type of O. perpusilla, Walk., is in bad condition, headless and probably discoloured. It is therefore not clear why Melichar should have placed the Ormenis inferior, Fowl, as a synonym of it, particularly as he had previously placed this same O. inferior as a synonym of O. tortricina, Germ.

Genus Cyarda.

Cyarda, Walk. List Hom., Suppl. p. 121 (1858).

Type, C. difformis, Walk.

Cyarda difformis.

Cyarda difformis, Walk. List Hom., Suppl. p. 121 (1858). Preciloptera iniquipennis, Walk. Ins. Saund., Hom. p. 107 (1858). Cyarda acuminipennis, Melich. (part.) Ann. Hofmus. Wien, xvii. p. 134 (1902).

Hab. St. Domingo.

Genus Colpoptera.

Colpoptera, Burm. Handb. Ent. ii. p. 155 (1839).

Type, C. sinuata, Burm.

The proper position of this genus is difficult to locate. Stål seemed to have placed it between the Issinæ and Ricaniinæ, Fowler in the Issinæ, Melichar and Van Duzée in the Ricaniinæ. It is probable that its natural position is in the Flatinæ near *Cyarda*, Walk., though the scarcely perceptible granules to the claval area renders this decision a tentative one only.

Colpoptera elevans.

Paciloptera elevans, Walk. List Hom., Suppl. p. 335 (1858).

Ormenis elevans, Melich. Ann. Hofmus. Wien, xvii. p. 71 (1902).

Colpoptera rugosa, Van Duz. Bull. Buff. Soc. Nat. Sci. viii. p. 36 (1907).

Hab. Jamaica.

Genus Seliza.

Seliza, Stål, Berl. ent. Zeitschr. iv. p. 312 (1862).

Type, S. vidua, Stål.

Seliza? lignarius.

Flatoides lignarius, Walk. List Hom. ii. p. 413 (1851). Paciloptera punctifrons, Walk. loc. cit., Suppl. p. 118 (1858). Seliza ferruginea, Melich. (part.) Ann. Hofmus. Wien, xvii. p. 138 (1902).

Hab. China.

Seliza immunis.

Preciloptera immunis, Walk. Ins. Saund., Hom. p. 107 (1858).
Ormenis? immunis, Melich. Ann. Hofmus. Wien, xvii. p. 98 (1902).

Hub. ——?

Genus Anaya.

Anaya, Dist. Faun. B. I., Rhynch. iii. p. 447 (1906).

Type, A. mesochlora, Walk.

Anaya pustulata.

Flatoides pustulatus, Walk. Ins. Saund., Hom. p. 48 (1858).

Ormenis mesochlorus, Melich. (part.) Ann. Hofmus. Wien, xvii. p. 99 (1902).

Anaya mesochlora, Dist. (part.) Fann. B. I., Rhynch. iii. p. 447 (1906).

Hab. ——?

I had followed Melichar in considering the F. pustulatus, Walk., as a synonym of F. mesochlorus. Walk., but now that I have been able to find and examine the type of the first

mentioned species it is evident that it is altogether distinct, though unfortunately unlocalized.

Anaya nicobarensis, sp. n.

Body and legs brownish ochraceous; lateral spots to abdomen above, vertex, and face chocolate-brown; tegmina brownish ochraceous, the apical margin paler, about basal half of costal membrane and radial area jet-black, clavus piceous, a central discal white patch on which are three somewhat large black spots, and beyond this white patch a cluster of more irregular and smaller black spots; wings pale fuliginous, with greyish-white streaks between the veins on basal area; vertex transverse, centrally ridged and laterally carinate; face about as broad as long, centrally ridged, laterally broadly laminately ridged; tegmina with the costal margin arched at base, the apical margin truncate; costal membrane a little wider than radial area; clavus somewhat strongly granulose.

Long., excl. tegm., $6\frac{1}{2}$ mm.; exp. tegm. 17 mm. Hab. Nicobar Islands; Narcondam (G. Royers, Brit. Mus.).

Gen.? basalis.

Flatoides basalis, Walk. List Hom. ii. p. 419 (1851); Melich. Ann. Hofmus. Wien, xvii. p. 228 (1902).

This species apparently represents a new genus near Anaya. The condition of the unique unlocalized type, however, scarcely warrants generic description.

Genus Cyphopterum.

Cyphopterum, Amyot. Ann. Soc. Ent. Fr. (2) v. p. 176 (1847); Melich. Ann. Mus. Nat. Hung. iii. p. 475 (1905).

Cyphopterum retusum.

Issus retusus, Walk. List Hom. ii. p. 371 (1851). Cyphopterum retusum, Melich. Ann. Mus. Nat. Hung. iii. p. 477 (1905). Hysteropterum curvipenne, Walk. Ins. Saund., Hom. p. 45 (1858).

The species described by Walker as *Hysteropterum curvipenne* is located as from "Port Philip." This is evidently incorrect, as it is an undoubted synonym of *C. retusum*.

The British Museum possesses a long series collected by Mr. Wollaston at the Cape Verde Islands, besides specimens from Madeira.

Genus Hyphancylus.

Hyphancylus, Fowl. Biol. Centr.-Am., Rhynch. Hom. i. p. 117 (1904); Melich. Mon. Issid. p. 114 (1906).

Type, H. falcatus, Fowl.

Owing to the granulate clavus this genus seems better located in the Flatinæ than in the Issinæ, where it was originally placed. It can be located near Cyphopterum, Amyot.

Genus Massila.

Massila, Walk. Journ. Entom. i. p. 314 (1862).

Type, M. sicca, Walk.

Massila ptyeloides.

Dechitus? ptyeloides, Walk. Journ. Entom. i. p. 311 (1862); Melich. Mon. Ricaniid. p. 341 (1898).

Hab. Moreton Bay.

Closely allied to M. sicca, Walk.

Genus Uxantis.

Uxantis, Stål, Öfv. Vet.-Ak. Förh. 1870, p. 775.

Type, U. consputa, Stål.

Uxantis notata, sp. n.

Vertex, pronotum, and mesonotum very pale virescent, abdomen above more distinctly greenish; vertex with three black spots, one at each basal angle, the other at apex; pronotum sparingly coarsely blackly punctate: mesonotum with sublateral black fasciæ, which are furcate anteriorly; body beneath and legs very pale virescent; basal margin and basal halves of lateral margins narrowly pale testaceous (this marginal coloration is absent in some specimens); tegmina pale grevish, opaque, the numerous veins and veinlets testaceous or fuscous brown, a series of small marginal piceous spots on posterior margin from apex of clavus, and these spots in smaller size, less distinct appearance, and less closely situate are continued round apical and along costal margins; wings creamy white, the veins more or less virescent; vertex broader than long, moderately concave, anteriorly transversely angulate, the margins ridged; face slightly longer than broad, the lateral margins ridged; tegmina about two and a half times as long as broad, the costal margin a little waved, widest at

base, moderately attenuated at apex, which is rounded, distinctly arched at base of costal margin.

Long., excl. tegm., δ ? 7–8 mm.; exp. tegm. 24–27 mm.

Hab. Queensland (F. P. Dodd, Brit. Mus.).

Genus Atracis.

Atracis, Stål, Hem. Afr. iv. p. 250 (1866).

Type, A. pyralis, Guér.

Atracis basistigma.

Elidiptera basistigma, Walk. List Hom., Suppl. p. 69 (1858). Atracis humeralis, Melich. (part.) Ann. Hofmus. Wien, xvii. p. 187

(1902).

Flatoides humeralis, Fowl. (part.) Biol. Centr.-Am., Rhynch. Hom. i.

p. 60 (1900). Flatoiaes basistiqma, Fowl. loc. cit. p. 61.

Hab. Mexico.

Atracis humeralis.

Elidiptera humeralis, Walk. List Hom., Suppl. p. 70 (1858).

Flatoides humeralis, Fowl. (nec Walk.) Biol. Centr.-Am., Rhynch. Hom. i. p. 60 (1900).

Atracis humeralis, Melich. (nec Walk.) Ann. Hofmus. Wien, xvii. p. 187 (1902).

Hab. Central America, Amazons.

Both Fowler and Melichar have confused the references of this species by citing the *Flatoides humeralis*, Walk. (List Hom. ii. p. 405, 1851), which is a Ricaniid, and, as correctly given by Melichar previously (Mon. Ricaniid. p. 297, 1898), *Vutina atrata*, Fabr.

Genus Uysanus.

Uysanus, Dist. Ins. Transvaal. p. 205 (1908).

Type, U. fluctuans, Dist.

Uysanus nebulosa.

Atracis nebulosa, Melich. Ann. Hofmus. Wien, xvii. p. 180, t. ix. fig. 11 (1902).

Hab. Cameroons.

Genus Flatoides.

Flatoides, Guér, Règn. Anim., Ins. p. 362 (1838)

Type, F. tortrix, Guér.

Flatoides occidentis.

Elidiptera occidentis, Walk. List Hom. ii. p. 331 (1851).

Cyarda occidentis, Stål, Öfv. Vet.-Ak. Förh. 1862, p. 490.

Flatoides isabellinus, Fowl. Biol. Centr.-Amer., Rhynch. Hom. p. 63, t. viii. fig. 5 a (1900).

Hab. Central America.

Flatoides debilis.

Elidiptera debilis, Walk. List Hom., Suppl. p. 72 (1858).

Cyarda debilis, Stål, Öfv. Vet.-Ak. Förh. 1862, p. 490.

Cyarda acuminipennis, Nelich. (part.) Ann. Hofmus. Wien, xvii. p. 134 (1902).

Hab. Amazons.

It is apparent that some of the notes taken by Stål during his visit to the British Museum in 1862 must have become transposed, or he would have been unlikely to place this species in the very distinct *Cyarda*, Walk.

Flatoides dorsisigna.

Elidiptera dorsisigna, Walk. List Hom., Suppl. p. 72 (1858). Dascalia dorsisigna, Melich. Ann. Hofmus. Wien, xvii. p. 154 (1902).

Hab. Amazons.

Flatoides punctata.

Elidiptera punctata, Walk. List Hom. ii. p. 332 (1851).

Cyarda punctata, Stål, Öfv. Vet.-Ak. Förh. 1862, p. 490; Melich. (part.) Ann. Hofmus. Wien, xvii. p. 135 (1902).

Hab, "North America."

The figure given by Melichar as punctata, Walk. (supra, t. vii. fig. 17), represents a true Cyarda, but not Walker's species nor either of the two others he has placed as synonymic with it.

Flatoides guianæ.

Elidiptera guianæ, Walk. List Hom. ii. p. 333 (1851).

Cyarda guyanæ, Stål, Öfv. Vet.-Ak. Förh. 1862, p. 490.

Cyarda punctata, Melich. (part.) Ann. Hofmus. Wien, xvii. p. 135 (1902).

Hab. British Guiana.

This species has considerable resemblance to *F. punctata*, Walk., but the head of the unique type is mutilated, and therefore it must at least be kept separate for the present.

Flatoides conformis.

Flatoides conformis, Walk. List Hom. ii. p. 412 (1851).

Cyarda conformis, Stal, Öfv. Vet.-Ak. Förh. 1862, p. 490; Melich. Ann. Hofmus. Wien, xvii. p. 134 (1902).

Hab. Jamaica.

Flatoides cervinus.

Flatoides cervinus, Walk. List Hom. ii. p. 412 (1851).

Cyarda cervinus, Stål, Öfv. Vet.-Ak. Förh. 1862, p. 490.

Cyarda acuminipennis, Melich. (part., nec fig.) Ann. Hofmus. Wien, xvii. p. 134 (1902).

Elidiptera punctifera, Walk. List Hom., Suppl. p. 71 (1858).

Cyarda punctifera, Stål, Öfv. Vet.-Ak. Förh. 1862, p. 490. Cyarda punctata, Melich. (part., nec fig.) Ann. Hofmus. Wien, xvii. p. 135 (1902).

Hab. Jamaica, St. Domingo.

Flatoides alba.

Elidiptera alba, Walk. Journ. Ent. i. p. 307 (1862).

Hab. Rio Janeiro.

Unique type in too mutilated a condition for generic identification.

----? incerta.

Pacciloptera incerta, Walk. List Hom. ii. p. 462 (1851).
Ormenis incerta, Melich. Ann. Hofmus. Wien, xvii. p. 98 (1902).

Hab. ——?

Melichar only copies Walker's description, and had not seen the species.

Species described by Walker in the Flatinæ, but not belonging to that subfamily.

Subfam. CIXIINÆ.

--- constellaris.

Pæciloptera constellaris, Walk. List Hom., Suppl. p. 335 (1858); Melich. Ann. Hofmus. Wien, xvii. p. 226 (1902).

Hab. Amazons.

The unique specimen representing this species has the head mutilated, which renders exact generic identification impossible. It probably represents a genus allied to *Paulia*, Stål.

Subfam. Tropiduchina.

- docilis.

Elidiptera docilis, Walk. List Hom., Suppl. p. 71 (1858).

Hab. Rio Janeiro.

Subfam. Lophopina.

Genus Elasmoscelis.

Elasmoscelis, Spin. Ann. Soc. Ent. Fr. viii. p. 388 (1859).

Type, E. cimicoides, Spiu.

Elasmoscelis decora.

Flatoides decorus, Walk, List Hom, ii. p. 418 (1851); Melich. Ann. Hofmus. Wien, xvii. p. 228 (1902).

Hab. ——?

The type is without locality. It is allied to E. trimaculata, Walk.

Subfam. Issinæ.

Trienopa rufescens.

Elidiptera rufescens, Walk. List Hom. ii. p. 334 (1851). Eriphyle rufescens, Stâl, Öfv. Vet.-Ak. Förh. 1862, p. 490.

Hab. Sierra Leone.

This species seems to have been missed by Dr. Melichar in his 'Monogr. der Issiden.'

Gen.? limitata.

Elidiptera fimlivata, Walk, List Hom. ii, p. 329 (1851) (nom. misprint.). Elidiptera limitata, Walk, loc. cit., Suppl. p. 68 (1858) (nom. nov.). Iterilia limitata, Stål, Öfv. Vet.-Ak, Förh. 1862, p. 490.

This species belongs to a genus very near *Pterilia*, but the type specimen is not in a very satisfactory condition.

Fam. Jassidæ.

Subfam. LEDRINÆ.

Pæcilopteru solita, Walk. List Hom. ii. p. 467 (1851).

The type of this species is in a most mutilated condition, nevertheless the structure of the head shows its proper

position in the Ledrinæ. Stål evidently must have wrongly incorporated a note when he placed this species (Hem. Afr. iv. p. 246) as a synonym of his *Phlebopterum præmorsum*, which he figured (Öfv. Vet.-Ak. Förh. 1856, p. 67, pl. i. fig. 8). Melichar has copied the error (Ann. Hofmus. Wien, xvii. p. 2, 1902).

- XLIV.—The Collections of William John Burchell, D.C.L., in the Hope Department, Oxford University Museum.
- IV. On the Lepidoptera Rhopalocera collected by W. J. Burchell in Brazil, 1825-1830. By E. G. Joseph, of Lincoln College, Oxford.

[Continued from ser. 8, vol. iii. p. 111.]

VII. HELICONIINÆ.

MR. J. C. MOULTON having left England in order to undertake the curatorship of the Sarawak Museum, I suggested to Mr. E. G. Joseph, of Lincoln College, Oxford, the preparation of an account of further groups of Burchell's Brazilian butterflies. To this Mr. Joseph readily assented, and, in the course of the work, I have had abundant opportunities of witnessing the great patience with which he has performed this laborious task and his success in doing justice to the wonderful accuracy and powers of observation of the illustrious naturalist.

E. B. POULTON.

The following paper forms the continuation of the valuable publications of Mr. J. C. Moulton on Burchell's Brazilian Nymphalinæ and of Miss Cora B. Sanders on the earlier subfamilies.

In the nomenclature and succession of the species of Heliconiinæ I have followed Stichel's monograph in Wytsman's 'Genera Insectorum', and have only departed from his arrangement by splitting up *Heliconius nanna* into two subspecies.

The whole of the Heliconiinæ in the Hope Department have been worked out and arranged, according to Stichel's monograph, by Mr. W. J. Kaye, F.E.S. I owe a deep debt

¹ 37th Fascicule of the 'Genera Insectorum,' edited by P. Wytsman. Lepidoptera, Rhopalocera: Fam. Nymphalidæ, Subfam. Heliconiinæ, 1906.